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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,114	09/20/2001	Donald V. Perino	RB1-035USC3	4507
29150	7590	07/14/2004	EXAMINER	
LEE & HAYES, PLLC 421 W. RIVERSIDE AVE, STE 500 SPOKANE, WA 99201			FIGUEROA, FELIX O	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/961,114

Applicant(s)

PERINO ET AL.

Examiner

Felix O. Figueroa

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 89, 90 and 98-111 is/are pending in the application.
- 4a) Of the above claim(s) 89 and 90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 98-111 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 19, 2004 has been entered.

Election/Restrictions

This application contains claims 89 and 90 drawn to a non-elected invention. A complete reply to Office action must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 98-111 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Please note that the original disclosure does not provide basis for the second end disconnected from and extending away from the

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chip package through the length in combination with an indentation in the chip package (as shown in Figs 18-23).

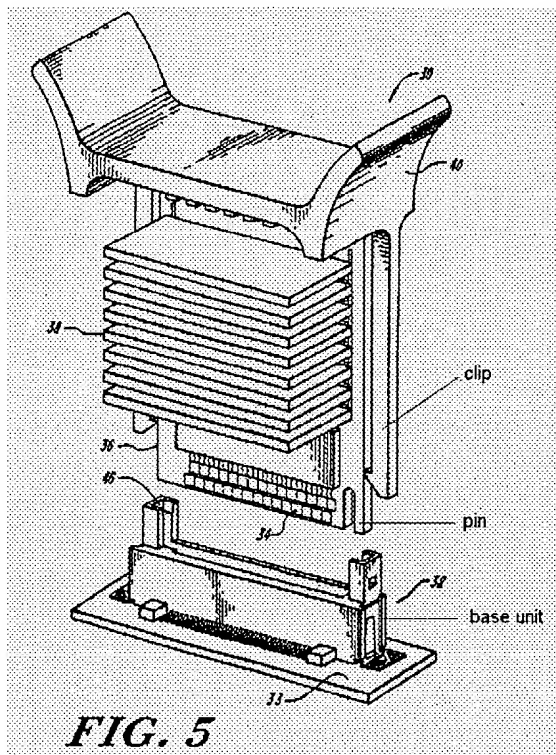
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 98-102 and 108-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellomo et al. (US 5,419,712) in view of Ester (US 5,214,563).

Bellomo discloses a chip socket assembly comprising: a single chip package (36) configured to house a single integrated circuit chip; a first clip arm extending from a first side of the chip package; a second clip arm extending from a second side of the chip package, the first side and the second side being opposite one another; and leads (34) connected to a third side of the chip package. See the following Figure.



Bellomo discloses substantially the claimed invention except for the flexible leads. Estes discloses a chip package (110) with a plurality of flexible leads (120), each flexible lead having a length, a first end connected to a side of the chip package, and a second end disconnected (separate) from the third side of the chip package and extending away from the chip package through the length, each flexible lead configured to provide mechanical and electrical connection between the single integrated circuit chip and a circuit board and an indentation (dashed lines in Fig. 5) in the chip package into which the second end of the flexible leads are extendable to enable a flexible mounting and protect the second end of the leads. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the chip package of Bellomo with flexible leads, as taught by Estes, to enable a flexible mounting and protect the second end of the leads.

Regarding claim 99, Bellomo discloses the first clip arm and the second clip arm each include a ledge protruding from their ends, the chip socket assembly further comprising: a base (32) for receiving the chip package and facilitating the mechanical and electrical connection between the single integrated circuit chip and the circuit board (33), the base having a first socket and a second socket (at 46) for securing the chip package to the base, the first socket configured to receive the ledge of the first clip arm and the second socket configured to receive the ledge of the second clip arm.

Regarding claim 100-102, Estes discloses the flexible leads are substantially C-shaped; being compressible; and extending into the indentation when compressed.

Regarding claim 107, Bellomo discloses substantially the claimed invention except for the specific material of the lead. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use beryllium-cooper as the preferred material in order to provide good conductivity, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 108-110, Bellomo discloses substantially the claimed invention except for the material of the packaging material and/or the IC. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a flexible material, e.g. silicon rubber, as the preferred material, since it has been held to be within the general skill of a worker in the art to select a known material on the

basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 111, Bellomo discloses a pin (see previously shown Figure) extending from the chip package; and a slotted guide in the base configured to receive the pin and guide the chip package into the base.

Claims 103-106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellomo and Estes as discussed above and further in view of Cutchaw (US 4,293,175).

Bellomo, as modified, discloses substantially the claimed invention except for the flexible insert. Cutchaw teaches the use of a flexible insert (110) interposed between the lead (98a) and the first side of the packaging material (92a) to provide a flexible and aligned contact with the mating element. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the package of Bellomo, as modified, with a flexible insert interposed between the leads and the first side of the packaging material, as taught by Cutchaw, to provide a flexible and aligned contact with the mating element.

Regarding claim 104, Bellomo, as modified by Cutchaw, discloses substantially the claimed invention except for cylindrical shape. However, it would have been an obvious choice one having ordinary skill in the art to form the insert having a different shape, e.g. being cylindrical, since applicant has not disclosed that such shape solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with insert of Cutchaw.

Regarding claims 105 and 106, Cutchaw discloses the insert being of a compliant material, specifically an elastomer.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ffr

Felix O. Figueroa

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